

1           21.   (Once amended) A composition for a protective barrier against termite infestation,  
2 said barrier composition comprising an effective amount of a compound selected from the group  
3 consisting of nootkatone, zizanol, and bicyclovetivenol, and a wood building material, wherein said  
4 composition is essentially free of vetiver oil and wherein the treated building material repels or kills  
5 termites substantially more than does an otherwise identical material that has not been treated with  
6 the compound.

Please add the following two claims:

1           28.   (New) A composition for a protective barrier against termite infestation, said barrier  
2 composition comprising an effective amount of a compound selected from the group consisting of  
3 zizanol and bicyclovetivenol, and a substrate material, wherein said composition is essentially free  
4 of vetiver oil, and wherein such treated barrier repels or kills termites substantially more than does  
5 an otherwise identical barrier that has not been treated with the compound.

1           29.   (New) A composition as in Claim 28, additionally comprising treating the material  
2 with one or more different compounds selected from the group comprising nootkatone,  $\alpha$ -cedrene,  
3 zizanol and bicyclovetivenol.

#### REMARKS

The specification has been amended to refer to the PCT application from which this national stage application derives, and to the 19 October 1999 priority application.

Claims 1, 9, and 21 have been amended. Claims 28 and 29 have been added. Original Claims 1-8 have been allowed. Claims 1-29 remain in the application.

Independent Claims 1, 9, and 21 have been amended by incorporating the limitation that the treating composition of Claim 1 or the resulting compositions of Claims 9 and 21 are "essentially free of vetiver oil." This clarifies the claims as originally filed. The basis for these amendments may be found in the Description which discusses the invention in terms of "extracts of vetiver oil" or in terms of the four compounds, nootkatone,  $\alpha$ -cedrene, zizanol, and bicyclovetivenol. See, for

example, the Description at page 1, lines 16-18; page 4, lines 19-28; page 5, lines 4-18; page 18, lines 16-20; page 19, lines 4-13, and Claims 1, 9, and 21 as originally filed. In addition, all examples refer either to the isolation of extracts from vetiver oil (Examples 1 and 3) or to bioassay experiments conducted with isolated extracts of vetiver oil. (Example 2, crude extracts of vetiver oil; Example 4, 7, and 8, nootkatone; Example 5,  $\alpha$ -cedrene; and Example 6, zizanol and bicyclovetivenol.)

Claim 9 has also been amended to incorporate a Markush group corresponding to Claims 10, 13, and 14 as originally filed. Support for this amendment may be found in the Description on page 19, lines 9-13, and in Claims 10, 13, and 14, as originally filed.

Claims 28 and 29 have been added. Support for these new claims can be found in the Description, pg. 16, line 1, to pg. 17, line 26; and in Claims 9 and 20 as originally filed.

In accordance with 37 C.F.R. § 1.121 as recently amended, a marked-up version of the amended claims and the amended claims are presented in the Appendix.

Claims 1-29 remain in the application. Claims 1-8 as originally filed have been allowed. It is respectfully submitted that Claim 1 as amended should also be allowed, along with the dependent claims 2-8. The following remarks are offered in support of allowance of Claims 9-29. Reexamination and reconsideration of the application in light of the above amendments and the following amendments are respectfully requested.

### ***The § 102 Rejection***

Claims 9, 15, and 21 were stated to be rejected under 35 U.S.C. §102(e) and §102(b) as being anticipated by Takagi *et al.* (EP 1033076; 9/6/00). Neither the Takagi reference nor any of its patent family members (described below) meet the requirement for either §102(e) or §102(b). The references do not satisfy §102(e) because none are United States patents or applications. The reference does not satisfy §102(b) because neither the reference nor any of its patent family members were published more than a year before the priority date of this application (as shown below). However, in the expectation that the Office may cite this reference (or one of its patent family members) against the claimed invention under a different 102 section, Applicants are offering the following remarks to expedite the prosecution process.

The claimed inventions in this application have a priority date of 19 October 1999, the filing date of provisional application S.N. 60/160,251. This priority date precedes the September 6, 2000 publication date of the cited reference, EP 1033076. However, Applicants are aware that the PCT International Search Report cited other Patent Family Members with publication dates in 1999. These other family members with publication dates in 1999 were WO 9925196 published on June 27, 1999 (in Japanese), JP 11240802 published on September 7, 1999, and AU 1053699 published on June 7, 1999. Applicants submitted applications EP 1033076 and WO 9925196 with the original IDC filed with this application on May 23, 2001. We believe that the Australian application is a copy of the PCT application, WO 9925196. In response to this office action, we recently obtained a copy of an abstract of JP 11240802, and discovered the translation to be somewhat different than the English abstract of WO 9925196. With this amendment, we are thus submitting a copy of this abstract with a Supplemental IDC. Applicants believe that no fee is due to submit this reference under 37 C.F.R. §1.97(c) and (e). If this belief is incorrect, please refer to the Deposit Account Authorization previously filed for this application. Assuming that the applications in Japanese are equivalent and were available as a reference prior to the priority date of 19 October 1999, Applicants make the following remarks regarding this reference and the claimed inventions:

The Office cited Takagi as teaching "a composition comprising nootkatone plus water (substrate material or wood building material). Takagi also teaches that the aqueous composition can be applied to rooms (substrate materials) to control mosquitoes." (pg. 2, Office Action).

Takagi *et al.* describe an invention for "an indoor hematophagous insect repellent," specifically blood-sucking mosquitos. See page 2, paragraphs 0001, 0005, and 0007. The nootkatone is "applied after formulating to indoor aromatics, aerosols, sheets or coatings, usually retained in liquid, solid, gel-like or gaseous carrier." See page 2, paragraph 0007. See also, the abstract of JP10325392, which describes "a repellent against blood-sucking noxious insects for an indoor space," and a repellent that "can be usually used by retaining on a liquid, solid, gel, or gas carrier followed by preparing as indoor fragrance, aerosol, sheets, or coating."

Claims 9 and 21 have been amended. Claim 9, as amended, describes a 'barrier composition comprising an effective amount of a compound selected from the group consisting of nootkatone, zizanol and bicyclovetivenol, and a substrate material selected from the group consisting of mulch, soil, and diatomaceous earth." The Takagi *et al.* reference neither teaches nor suggests treating any

outdoor material such as mulch, soil, or diatomaceous earth with nootkatone. Moreover, due to the difference in flying mosquitos and subterranean termites, the description in Takagi *et al.* would not motivate one to add nootkatone to an outdoor material as a barrier to repel termites. Thus the Takagi reference neither anticipates nor makes obvious the invention as claimed in amended Claim 9, and in its dependent Claim 15. It is respectfully submitted that this §102 rejection should be withdrawn.

Claim 21, as amended, claims a “barrier composition comprising an effective amount of a compound consisting of nootkatone, zizanol, and bicyclovetivenol, and a wood building material.” Claim 21 claims treating the wood building material with nootkatone. As discussed above, the Takagi *et al.* reference discusses only an “indoor hematophagous insect repellant” usually expressed as an “aromatic, aerosols, sheets or coating.” None of the examples encompasses a wood building material. Moreover, treating a wood building material with nootkatone would not accomplish what the Takagi reference was try to achieve, an indoor repellent for flying blood-sucking insects. The reference neither teaches nor suggests treating “a wood building material” with nootkatone. One would not be motivated by the description in Takagi *et al.* to treat a wood building material with nootkatone to repel termites.

It is respectfully submitted that the §102 rejections should be withdrawn.

### ***The § 103 (a) Rejection***

Claims 16, 17, and 22-24 were rejected under 35 U.S.C. §103(a) as being obvious over Takagi *et al.* (EP 1033076; 9/6/00). Claims 16 and 17 are dependent from Claim 15. As discussed above, Claim 15 is neither anticipated nor made obvious by Takagi *et al.*, and thus Claims 16 and 17 that dependent from this Claim are not obvious.

Claims 22-24 depend from Claim 21. Claim 21, as discussed above, is neither anticipated nor made obvious by Takagi *et al.*, and thus the Claims that depend from Claim 21 would neither be obvious nor anticipated.

It is respectfully submitted that the § 103 rejections should be withdrawn.

### ***Claim Objections***

Claims 10-14, 18-20, and 25-27, dependent claims of Claim 9 and 21, were objected to as being dependent upon a rejected base claim. For the reasons discussed above, the rejections to

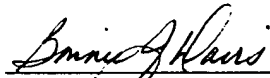
Claims 9 and 21 should be withdrawn, and the base claims allowed. If the independent claims are neither anticipated nor obvious, then the dependent claims should be allowed.

Applicants respectfully submit that these objections should be withdrawn.

### **Conclusion**

For the reasons discussed, it is respectfully submitted that all pending claims are in condition for allowance. If the Office disagrees with any of these remarks, or if other issues arise that may present an obstacle to allowance, the undersigned would welcome a telephone call to discuss such matters before further action is taken. Otherwise, allowance of Claims 1-29 at an early date is solicited.

Respectfully submitted,



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## Appendix -- Marked-Up Claim Amendments

1           1.       (Once amended) A method for protecting a material from termite infestation,  
2 comprising treating the material with a composition comprising an effective amount of a compound  
3 selected from the group consisting of nootkatone, zizanol, and bicyclovetivenol, wherein said  
4 composition is essentially free of vetiver oil and wherein the treated material repels or kills termites  
5 substantially more than does an otherwise identical material that has not been treated with the  
6 [compound] composition.

1           9.       (Once amended) A composition for a protective barrier against termite infestation,  
2 said barrier composition comprising <sup>ce</sup> an effective amount of a compound selected from the group  
3 consisting of nootkatone, zizanol and bicyclovetivenol, and a substrate material selected from the  
4 group consisting of mulch, soil, and diatomaceous earth, wherein said composition is essentially free  
5 of vetiver oil and wherein such treated barrier repels or kills termites substantially more than does  
6 an otherwise identical barrier that has not been treated with the compound.

1           21.      (Once amended) A composition for a protective barrier against termite infestation,  
2 said barrier composition comprising an effective amount of a compound selected from the group  
3 consisting of nootkatone, zizanol, and bicyclovetivenol, and a wood building material, wherein said  
4 composition is essentially free of vetiver oil and wherein the treated building material repels or kills  
5 termites substantially more than does an otherwise identical material that has not been treated with  
6 the compound.

1           28.      (New) A composition for a protective barrier against termite infestation, said barrier  
2 composition comprising an effective amount of a compound selected from the group consisting of  
3 zizanol and bicyclovetivenol, and a substrate material, wherein said composition is essentially free  
4 of vetiver oil, and wherein such treated barrier repels or kills termites substantially more than does  
5 an otherwise identical barrier that has not been treated with the compound.

1           **29.**   (New) A composition as in Claim 28, additionally comprising treating the material  
2   with one or more different compounds selected from the group comprising nootkatone,  $\alpha$ -cedrene,  
3   zizanol and bicyclovetivenol.